REMARKS

Claims 1-54 are pending in the application.

Claims 1-54 stand rejected.

Formal Matters

Claims 9, 23 and 38 have been objected to for a stated informality that the term "a protocol processor" is not proper. The Examiner has suggested changing the term to "a processor."

Applicant respectfully declines to amend the stated claims at this time. The Office Action does not provide a reason why the term "protocol processor" is improper. Further, the Specification provides multiple examples of a protocol processor. *See* Application, p.5, lines 20-25; Application, p.6, line 27-p.7, line 6. While Applicant declines the opportunity to modify the claims as suggested, Applicant reserves the right to so modify at a later date.

Rejection of Claims under 35 U.S.C. §102

Claims 1, 2, 4-7, 11-15, 16, 18-21, 25, 29-31, 33-36, 40, 44, 45, 47-49, and 51 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,654,802 issued to Oliva et al. ("Oliva"). Applicant respectfully traverses this rejection.

In order for a reference to anticipate claims under §102(e), the reference must disclose each and every limitation of the subject claims. Applicant respectfully submits that the Oliva reference does not include all of the limitations of the indicated claims.

Claims 1, 15, 29, 30, and 44. Independent Claims 1, 15, 29, 30, and 44 each contain limitations related to "data in a transport overhead field" and "the data providing a source

identifier and a destination identifier." The Oliva reference makes no disclosure of data in a transport overhead field containing <u>both</u> a source identifier and <u>a destination identifier</u>. In fact, Oliva only discloses source identifier data in an overhead field. *See, e.g.*, Oliva 5:32-35 ("each <u>source port</u> 26 of each node transmits the network element and port identifiers using transport overhead bytes")(emphasis added); Oliva 4:24-26 ("overhead data...is used to transmit unique network and port identifiers from a <u>source node</u> to a destination node connected by a link.")(emphasis added); Oliva 7:15-20 ("for each connection between network elements 42 and 44, the source network node, such as network element 42, provides <u>identification of the source network element as well as identification of the source port</u>, such as port 52, using bytes I the frame overhead to the destination node, such as network element 44")(emphasis added). These passages, along with others in the Oliva disclosure, demonstrate that Oliva does not place destination identifiers in a transport overhead field. It should also be noted that the topology trace channels by which Oliva's management system receives topology data are not disclosed to be transport overhead fields.

Each of the above-listed independent claims also contains limitations related to use of the data in the transport overhead field to "provide end-to-end services." Applicant respectfully submits that the Oliva reference fails to indicate that the data in the transport overhead field is being used to provide end-to-end services. Oliva merely points to a disclosed management system as a means to generate a network topology, which falls short of "end-to-end services" as claimed. Further, the Office Action fails to provide specific passages within Oliva that relate to this claim limitation. Instead, it merely points to the management system as the means for using the data in the transport overhead field and then points to the path overhead disclosure and passages describing transmittal of overhead and the advantages of doing so. Applicant

respectfully submits that this disclosure does not show using the data in the transport overhead field to provide end-to-end services.

For the reasons set forth above, Applicant respectfully submits that Oliva does not disclose each limitation of the independent claims in the present application and therefore those claims are not anticipated. Further, the listed claims that are dependent on the independent claims are likewise not anticipated for at least the above reasons. Therefore, Applicant respectfully submits that Claims 1, 2, 4-7, 11-15, 16, 18-21, 25, 29-31, 33-36, 40, 44, 45, 47-49, and 51 are in condition for allowance and Applicant requests that the Examiner reconsider and withdraw the rejections.

Rejection of Claims under 35 U.S.C. §103

Claims 3, 10, 17, 24, 32, 39, 46, and 50 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Oliva in view of U.S. Patent Application Publication 2002/0009048 of Hosler et al. ("Hosler"). Claims 8, 9, 12-14, 22, 23, 26-28, 37, 38, 41-43, and 52-54 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Oliva in view of U.S. Patent 5,841,760 issued to Martin et al. ("Martin").

In order for a claim to be rendered invalid under 35 U.S.C. §103, the subject matter of the claim as a whole would have to be obvious of a person of ordinary skill in the art at the time the invention was made. *See* 35 U.S.C. §103(a). This requires (1) the reference(s) must teach or suggest all of the claim limitations; (2) there must be some teaching, suggestion or motivation to combine references either in the references themselves or in the knowledge of the art; and (3) there must be a reasonable expectation of success. *See* MPEP 2143; MPEP 2143.03; *In re Rouffet*, 149 F.3d 1350, 1355-56 (Fed. Cir. 1998).

All of the claims rejected under 35 U.S.C. §103(a) depend on claims discussed above with regard to the Oliva-based rejection under 35 U.S.C. §102. As such, these dependent claims contain limitations not disclosed in Oliva (as discussed above). The Office Action makes no suggestion that the references combined with Oliva to reject the various claims under 35 U.S.C. §103(a) provide those missing limitations. After review by Applicant, Applicant respectfully submits that neither Oliva combined with Hosler nor Oliva combined with Martin, taken alone or in combination, discloses or suggests the limitations discussed above. Without disclosure of each claimed limitation, the suggested combinations cannot render obvious the dependent claims.

No Motivation to Combine

The Office Action fails to establish a teaching, suggestion or motivation to combine Oliva with the Martin or Hosler references. The fields of invention for Oliva and Martin are not so similar that a person of ordinary skill in the art of networking would have been motivated to combine them. Oliva purports to relate to "automatic discovery of network topology in multi-node, multi-connection telecommunications networks." Oliva 1:20-22. Specifically, Oliva purports to relate to "real-time dynamic determination of the physical topology of a network as nodes and/or ports interfacing physical inter-node connections are added to, or deleted from, the network." Oliva, 1:22-25. On the other hand, Martin purports to relate to "a transparent multiplexer for telecommunications systems." Martin, 1:8. Martin relates generally to connecting low bandwidth tributaries to each other through a high bandwidth channel. Martin contains no disclosure related to topology determinations or of providing data in packet overhead.

As for Hosler, the Office Action suggests that a person of ordinary skill in the art would have been motivated to combine Oliva with Hosler in order to "utilize more bandwidth." The

Office Action fails to provide any reasoning why this would have been a result. Oliva only requires a source identifier in a packet overhead. Destination identification is provided to the disclosed management system by the receiving node. Were Hosler interpreted to add information to the packet, as the Office Action suggests, the result would likely have been the opposite of increasing utilization of bandwidth, since more data would have to be carried around in each packet.

Applicant therefore respectfully submits that the Examiner has not satisfied the burden of factually supporting the alleged motivation to combine the two references. The Examiner's duty may not be satisfied by engaging in impermissible hindsight (i.e., combining the references in the light of Applicant's disclosure); any conclusion of obviousness much be reached on the basis of facts gleaned from the references. The Examiner must therefore provide evidence to suggest the combination and "[b]road conclusory statements regarding the teaching of multiple references, standing alone, or not 'evidence.'" *See In re Dembiczak*, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999).

Applicant further respectfully submits that the particular sections of the cited references relied upon by the Examiner and the pertinence of each reference have not been clearly explained, especially with regard to the motivation to combine the references in each discussion related to the dependent claims. The Applicant requests that the Examiner clearly provide the pertinence of each reference as required by MPEP 706.02(j) and MPEP 707.07(d).

No Expectation of Success

Further, the Office Action does not establish that such a combination of the teachings of these references would meet with success, as required. The Office Action fails to provide any discussion related to expectation of success of the combinations suggested throughout the

obviousness section. As discussed above, there is no reason to believe that the combinations suggested would have met with success.

Martin. The Office Action suggests that Martin may be used to provide disclosure of line cards as required by Claims 8, 22 and 37. But the identified blocks in Fig. 6 (40 and 50) of Martin are not line cards. Instead, those blocks are disclosed to be transparent multiplexers. There is no suggestion that such multiplexers would work as the claimed line cards if combined with Oliva, nor would a person of ordinary skill expect that they would do so. Oliva does not contemplate using multiplexers. The additionally cited section does not refer to line cards but, instead, to the portions of a SONET frame.

As for Claims 9, 23, and 38, the Martin processors 80 and 86 re-associate overhead information with the appropriate payloads during reassembly. Such processing is not needed in Oliva since there is no reassembly stage. Therefore, there is no reason to expect such a combination to successfully lead to the claimed invention. Similarly for Claims 12, 14, 26, 28, 41, 43, 52 and 54, the cited sections of Martin separate "working traffic" from "protection traffic". One of ordinary skill in the art would not believe that such a process in combination with Oliva would successfully lead to the claimed wavelength routing protocol.

The cited sections of Martin related to Claims 13, 27, 42 and 53 (a) do not relate to an intelligent routing software system, but only to the J1 byte in the SONET standard, and (b) describe the pass-through nature of Martin, rather than an automatic routing system. Again, Applicant respectfully submits that a person of ordinary skill in the art would not expect that a combination with the topology determination system of Oliva would successfully result in the claimed invention.
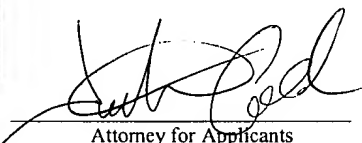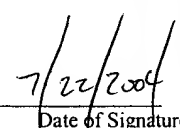
Hosler. The Office Action suggests that with regard to Claim 17, Hosler would add destination identification to Oliva to utilize more bandwidth. Applicant respectfully submits that such a combination would not successfully utilize more bandwidth. Oliva does not require or need destination identification to be part of a SONET packet. Inclusion of such information would not be used by Oliva and would only serve to consume bandwidth, rather than efficiently utilize it. As for Claim 24, the cited sections of Hosler discuss the use of routing tables and do not suggest a successful combination with Oliva to result in the provision of the data suggested in the Claim.

For at least these reasons, Applicant respectfully submits that the Office Action fails to present a *prima facia* case of obviousness of Claims 3, 8-10, 12-14, 17, 22-24, 26-28, 32, 37-39, 41-43, 46, 50, and 52-54, and that they are in condition for allowance. Applicant therefore respectfully requests the Examiner's reconsideration and withdrawal of the rejections to these claims.
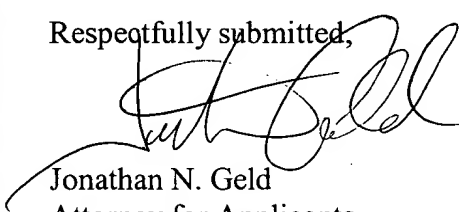
CONCLUSION

In view of the amendments and remarks set forth herein, the application and the claims

therein are believed to be in condition for allowance without any further examination and a

notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to

resolution through a telephonic interview, the Examiner is invited to telephone the undersigned

at 512-439-5090.

I hereby certify that this correspondence is being deposited with
the United States Postal Service as First Class Mail in an envelope
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P.O. Box 1450, Alexandria, VA 22313-1450, on July 22, 2004.

_____   ___7/22/2004___
Attorney for Applicants   Date of Signature

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- 16 -